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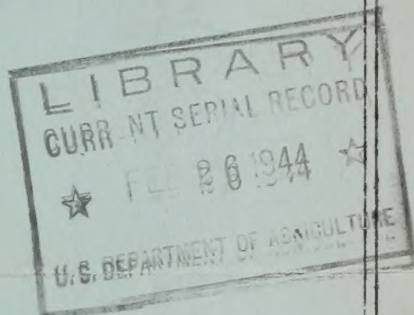
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SNOW SURVEYS AND IRRIGATION WATER FORECASTS

for the

RIO GRANDE DRAINAGE BASIN

February 1, 1944



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Issued by the
United States Department of Agriculture
Soil Conservation Service
Division of Irrigation
In Cooperation with
The Colorado Agricultural Experiment Station
Colorado State College
Fort Collins, Colorado

February 10, 1944

THE UNITED STATES OF AMERICA

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The following data pertaining to snow surveys and irrigation water-supply forecasts are provided by the Division of Irrigation, Soil Conservation Service of the U. S. Department of Agriculture, in cooperation with other Federal Bureaus, State Departments, and local organizations. The snow measurements are made principally by field personnel of the U. S. Forest Service and Colorado State Engineer. This work is otherwise conducted cooperatively with the State Engineers of Colorado and New Mexico, Colorado Agricultural Experiment Station, and various municipalities, irrigation associations and others. Precipitation records are supplied by the U. S. Weather Bureau.

PRECIPITATION DATA

WATERSHED	STATE	Precipitation		Departure		Precipitation		Departure	
		October 1 to January 31		from Normal		January		from Normal	
		Inches		Inches		Inches		Inches	
Canadian	New Mexico	3.05		+0.28		0.83		+0.47	
Rio Grande	Colorado	4.66		+0.20		1.44		+0.37	
Rio Grande	New Mexico	3.90		-0.24		0.87		+0.11	
Pecos	New Mexico	3.68		+0.63		0.85		+0.33	

Precipitation was above normal during January over the watersheds of the Canadian and Rio Grande in Colorado and New Mexico. The accumulated precipitation since October 1 was above normal except over the Rio Grande drainage in northern New Mexico. Similar conditions prevailed over the Pecos River watershed in New Mexico.

SUMMARY OF FEBRUARY 1 SNOW SURVEYS AND COMPARISON OF DATA WITH THAT OF PREVIOUS YEARS BY WATERSHEDS

WATERSHEDS	Snow Depth			Water Content			Number Courses in Average	Snow Density			1944 Water Content in percent of	
	Eight Year Avg.*	1943	1944	Eight Year Avg.*	1943	1944		Eight Year Avg.*	1943	1944	Eight Year Avg.*	1943
Rio Grande	In. 26.9	In. 26.2	In. 28.9	In. 6.3	In. 6.1	In. 6.2	20	Percent 23	Percent 23	Percent 21	98	102
Canadian River	In. 12.9	In. 5.3	In. 22.8	In. 2.5	In. 0.9	In. 2.3	1	Percent 19	Percent 17	Percent 12	112	310

*Some for shorter periods.

WATER SUPPLY OUTLOOK

For the Rio Grande and tributary watersheds, in New Mexico and the San Luis Valley in Colorado, the water content of the snow cover as shown by recent snow surveys, exceeds slightly that of a year ago at this time and is equal to the 8-year average. Reservoir storage in New Mexico is less than it was a year ago. El Vado Reservoir has about 75 percent, and Elephant Butte and Caballo combined, 70 percent of the amount in storage last year. For the San Luis Valley the storage is about 45 percent of last year. In the reservoirs on the Carlsbad Project, Pecos drainage, the present storage is 59,000 acre-feet as compared with 44,000 a year ago or about 30 percent more, and in the Conchas Reservoir, Canadian drainage, the active storage is 287,000 acre-feet. Last year it was 267,000, or about 10 percent more. For the Rio Grande drainage the stream flow is normal, likewise for the Pecos in the lower valley. The Canadian is below normal. Soil moisture in these areas is generally normal.

The outlook for the coming season's irrigation water supply for the Rio Grande drainage, as based on the present snow cover, is fairly promising. At elevations of 10,000 feet, San Luis Valley area, the water content of the snow averages 13 inches as compared with 14, the 8-year average. The density of the snow is less than it was a year ago. The fact that there is a deficiency of reservoir storage in this drainage area is discouraging. Winter runoff is relatively light and the accumulation of storage until late spring will not be great. At present the snow cover on the headwaters of the Canadian and Pecos is considerably better than last year and the storage in the lower valley reservoirs is improved. The present conditions are somewhat encouraging as to the prospects for water this coming season in this section of New Mexico.

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is divided into two main sections: the first section deals with the general situation of the country and the progress of the work during the year, and the second section deals with the results of the work during the year.

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Summary of Federal and State Cooperative Snow Surveys
Issued February 10, 1944, at Fort Collins, Colo.

*On adjacent drainage
Average for period of record

Average for period of record

